WHAT IS CLAIMED IS:

1. A biological preparation comprising a biological material and a purified, natural or recombinant, extracellular matrix degrading enzyme being externally adhered thereto.

2. The biological preparation of claim 1, wherein said biological material is a plurality of cells.

3. The biological preparation of claim 2, wherein said plurality of cells are selected from the group consisting of marrow hematopoietic or stromal stem cells, keratinocytes, blastocysts, neuroblasts, astrocytes, fibroblasts and genetically modified cells.

4. The biological preparation of claim 1, wherein said biological material is a tissue or a portion thereof.

5. The biological preparation of claim 4, wherein said tissue or said portion thereof is selected from the group consisting of embryo, skin flaps and bone scraps.

6. The biological preparation of claim 1, wherein said biological material is a drug delivery system.

7. The biological preparation of claim 1, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

8. The biological preparation of claim 7, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

9. Genetically modified cells expressing and extracellularly presenting or secreting a recombinant extracellular matrix degrading enzyme, said extracellular matrix degrading enzyme being externally presented or adhered thereto.

10. The genetically modified cells of claim 9, wherein the cells are selected from the group consisting of marrow hematopoietic or stromal stem cells, keratinocytes, blastocysts, neuroblasts, astrocytes, fibroblasts and cells genetically modified with a therapeutic gene.

11. The genetically modified cells of claim 9, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

12. The genetically modified cells of claim 11, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

13. A pharmaceutical composition comprising the biological preparation of claim 1 and a pharmaceutically acceptable carrier.

14. A pharmaceutical composition comprising the genetically modified cells of claim 9 and a pharmaceutically acceptable carrier.

15. An *in vivo* method of repairing a tissue, the method comprising the steps of:

(a) providing cells capable of proliferating and differentiating *in vivo* to form said tissue or a portion thereof, said cells having an extracellular matrix degrading enzyme externally adhered thereto; and

(b) administering said cells *in vivo*.

16. The method of claim 15, wherein said cells are genetically modified to express and extracellularly present or secrete said extracellular matrix degrading enzyme.

17. The method of claim 15, wherein said extracellular matrix degrading enzyme is a purified, natural or recombinant extracellular matrix degrading enzyme externally added to said cells.

18. The method of claim 15, wherein said cells are selected from the group consisting of marrow hematopoietic or stromal stem cells, keratinocytes, fibroblasts, blastocysts, neuroblasts and astrocytes.

19. The method of claim 15, wherein the tissue is selected from the group consisting of bone, muscle, skin and nerve.

20. The method of claim 15, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

21. The method of claim 20, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

22. An *in vivo* method of implanting a tissue or a portion thereof, the method comprising the steps of:

(a) externally adhering to the tissue or the portion thereof a purified, natural or recombinant, extracellular matrix degrading enzyme;

(b) implanting said tissue or the portion thereof *in vivo*.

23. The method of claim 22, wherein the tissue or the portion thereof is selected from the group consisting of embryo, skin flaps and bone scraps.

24. The method of claim 22, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

25. The method of claim 24, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

26. An *in vivo* method of cell transplantation, the method comprising the steps of:

(a) providing transplantable cells, said cells having an extracellular matrix degrading enzyme externally adhered thereto; and

(b) administering said cells *in vivo*.

27. The method of claim 26, wherein said cells are genetically modified to express and extracellularly present or secrete said extracellular matrix degrading enzyme.

28. The method of claim 26, wherein said extracellular matrix degrading enzyme is a purified, natural or recombinant extracellular matrix degrading enzyme externally added to said cells.

29. The method of claim 26, wherein said cells are selected from the group consisting of marrow hematopoietic or stromal stem cells, keratinocytes, blastocysts, neuroblasts, astrocytes and fibroblasts.

30. The method of claim 26, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

31. The method of claim 30, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a

connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

32. A somatic gene therapy method of *in vivo* introduction of genetically modified cells expressing a therapeutic protein, the method comprising the steps of:

(a) providing the genetically modified cells expressing the therapeutic protein having an extracellular matrix degrading enzyme externally adhered thereto; and

(b) administering said cells *in vivo*.

33. The method of claim 32, wherein said cells are further genetically modified to express and extracellularly present or secrete said extracellular matrix degrading enzyme.

34. The method of claim 32, wherein said extracellular matrix degrading enzyme is a purified, natural or recombinant extracellular matrix degrading enzyme externally added to said cells.

35. The method of claim 32, wherein said cells are selected from the group consisting of marrow hematopoietic or stromal stem cells, keratinocytes, blastocysts, neuroblasts, astrocytes and fibroblasts.

36. The method of claim 32, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

37. The method of claim 36, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

38. The method of claim 32, wherein said therapeutic protein is capable of relieving symptoms of a genetic disease.

39. The method of claim 38, wherein said genetic disease is selected from the group consisting of mucopolysaccharidoses, cystic fibrosis, Parkinsohn's disease ,Gaucher's syndrome and osteogenesis imperfecta.

40. A method of delivering a biological material across a biological blood barrier, the method comprising the steps of

(a) externally adhering to the biological material a purified, natural or recombinant, extracellular matrix degrading enzyme; and

(b) administering the biological material *in vivo*.

41. The method of claim 40, wherein said biological material includes cells.

42. The method of claim 41, wherein said cells are selected from the group consisting of marrow hematopoietic or stromal stem cells, keratinocytes, neuroblasts, astrocytes, fibroblasts and genetically modified cells.

43. The method of claim 40, wherein said biological material is a drug delivery system.

44. The method of claim 40, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

45. The method of claim 44, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

46. The method of claim 40, wherein the biological blood barrier is selected from the group consisting of blood-brain-barrier, blood-milk-barrier and maternal blood-placenta-embryo barrier.

47. A method of delivering cells across a biological blood barrier, the method comprising the steps of:

(a) genetically modifying the cells to express and extracellularly present or secrete an extracellular matrix degrading enzyme; and

(b) administering the cells *in vivo*

48. The method of claim 47, wherein said cells are further genetically modified to express a therapeutic protein.

49. The method of claim 47, wherein said cells are selected from the group consisting of marrow hematopoietic or stromal stem cells, keratinocytes, neuroblasts, astrocytes, fibroblasts and cells genetically modified to express a therapeutic protein.

50. The method of claim 47, wherein said extracellular matrix degrading enzyme is selected from the group consisting of a collagenase, a glycosaminoglycans degrading enzyme and an elastase.

51. The method of claim 50, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.

52. A method of managing a patient having an accumulation of mucoid, mucopurulent or purulent material containing glycosaminoglycans, the method comprising the step of administering at least one glycosaminoglycans degrading enzyme to the patient in an amount therapeutically effective to reduce at least one of the following: the visco-elasticity of the material, pathogens infectivity and inflammation, the at least one glycosaminoglycans degrading enzyme being administered in an inactive form and being processed by proteases inherent to the mucoid, mucopurulent or purulent material into an active form.

53. The method of claim 52, wherein said glycosaminoglycans degrading enzyme is selected from the group consisting of a heparanase, a connective tissue activating peptide, a heparinase, a glucoronidase, a heparitinase, a hyluronidase, a sulfatase and a chondroitinase.